From: **ANDERSON Jim M**

Eric Blischke/R10/USEPA/US@EPA To:

Subject: RE: BERA Check-Ins Date: 01/13/2009 11:19 AM

Thanks

----Original Message----

From: Blischke.Eric@epamail.epa.gov [mailto:Blischke.Eric@epamail.epa.gov] Sent: Tuesday, January 13, 2009 11:15 AM To: ANDERSON Jim M Subject: Fw: BERA Check-Ins

Here it is.

---- Forwarded by Eric Blischke/R10/USEPA/US on 01/13/2009 11:14 AM

"Keith Pine' <kpine@anchorenv</pre>

.com>

Eric Blischke/R10/USEPA/US@EPA

12/18/2008 10:13

Chip Humphrey/R10/USEPA/US@EPA,
"Bob Wyatt" <rjw@nwnatural.com>,
<johnt@windwardenv.com>,
"Jennifer Woronets"

<jworonets@anchorenv.com>

Subject

RE: BERA Check-Ins

Eric,

Thank you for providing clarification of your suggested check-ins on the draft baseline ecological risk assessment (BERA), enumerated below as items 1-8. The LWG and EPA share the goal that the baseline risk assessments and RI transparently support the FS. In that spirit the LWG wants to accommodate check-ins that can be completed within the RI schedule. Following is the LWG's appraisal of what can be accomplished within the current schedule.

1. EPCs: Provide EPCs for all media and receptors of concern. EPCs should be developed for SW, TZW, sediment and biota tissue. EPCs should (be) presented in a series of tables.

Response to #1: The LWG will provide the EPCs used for the initial and refined screens. The EPCs for BERA steps beyond the refined screen as they are modeling results that require assumptions about exposure areas, prey fractions etc. that aren't adequately conveyed in tables, absent the backup that the draft BERA will provide. In contrast, the EPCs for the exposure scenarios in the draft baseline human health risk assessment require less explanation and therefore are more amenable to presentation in tabular format. Another difference between the baseline ecological and human health EPCs is that the BHHRA EPCs will be available sooner, providing more time for useful dialogue before the draft BLRAs are delivered.

Modeled tissue concentrations: The BERA problem formulation contemplates the use of estimated fish tissue and bird egg concentrations. Modeled tissue concentrations should be presented in a series of tables.

Response to #2: The LWG has concluded that the presentation of modeled Response to #2: The LWG has concluded that the presentation of modeled fish tissue and bird egg concentrations requires a level of documentation that can't be provided on a more aggressive schedule than or with less documentation than the draft BERA will provide. We believe that pursuing this check-in would delay the FS schedule, and that the draft BERA is the proper forum for presenting modeled fish tissue and bird egg concentrations.

3. Dietary dose for fish and wildlife: The BERA problem formulation includes estimation of dietary doses for fish, birds and mammals. A table of estimated dietary doses should be provided.

Response to #3: The LWG considers this request to be part of the request for EPCs and our response to #1 applies. We will be happy to provide tables of screening-level dietary dose estimates along with the other screening-level EPCs.

4. Benthic Risk: Reference envelope calculations, predictive model(s) output should be provided in table format. A map depicting the results of the benthic risk evaluation should be provided.

Response to #4: As previously agreed, the LWG expects to present and discuss benthic risk assessment results by LOE in the check-in on the weight-of-evidence approach. Tabular output and maps are both

acceptable. We can discuss specific formatting requests with $\ensuremath{\mathtt{EPA's}}$ $\ensuremath{\mathtt{BERA}}$ lead or $\ensuremath{\mathtt{RPM}}$.

5. Refined Screen: It may be useful to provide a summary of the refined screen (chemicals that are carried forward)

Response to #5: The LWG will provide the requested summary of the refined screen as a check-in.

6. TRVs: Once the fish tissue TRVs are resolved, we should have agreement on the TRVs. However, we may want to confirm the TRVs that EPA provided previously (e.g., SQGs, water TRVs, dietary TRVs).

Response to #6: The LWG will provide the requested TRV tables as a check-in.

7. Probabilistic Approaches: It is unclear whether probabilistic approaches will be utilized in the BERA. If probabilistic approaches are being considered, we should discuss them.

Response to #7: The LWG is willing to make its BERA lead available to give EPA's BERA lead and RPM a preview of any probabilistic approaches used in the BERA, with the understanding that substantive questions or suggestions from EPA (if any) will probably have to be addressed after the draft BERA is submitted, through a normal comment-response process.

8. In addition to the above items, we have also discussed check-ins on the BSAF/FWM as part of the PRG development step and the weight of evidence approach some time later.

Response to #8: The LWG acknowledges our previous discussions regarding check-ins on the BSAF/FWM and the weight of evidence approach and our willingness to engage EPA in check-ins on these topics at the appropriate time.

We can discuss the BERA check-ins further at our January 14, 2009 Portland Harbor Managers meeting.

Happy Holidays! Keith

Keith Pine
Anchor Environmental, L.L.C.
1423 Third Avenue, Suite 300
Seattle, WA 98101-2177
Phone: 206-287-9130
Fax: 206-287-9131
The information is intended to be for the use of the individual or entity named above. If you are not the intended recipient, please be aware that any disclosure, copying, distribution or use of the contents of this information is prohibited. If you have received this electronic transmission in error, please notify us by electronic mail at kpine@anchorenv.com

----Original Message---From: Blischke.Eric@epamail.epa.gov
[mailto:Blischke.Eric@epamail.epa.gov]
Sent: Monday, December 08, 2008 4:20 PM
To: Bob Wyatt
Cc: Humphrey.Chip@epamail.epa.gov; Keith Pine
Subject: BERA Check-Ins

Bob, I spoke with Keith Pine regarding the BERA check-ins. We thought it would be useful for me to put some of this in writing so here it goes:

The goal of the check-ins is to 1) get a head start on the BERA and 2) Identify any major glitches in the BERA risk estimates. As was agreed upon for the HHRA, preliminary risk information should be posted on the LWG portal. Although I recognize the LWG's concern about providing this information, it is not our objective to get into a lot of back and forth on the preliminary information; unless we see a major discrepancy, this will only occur as part of our review of the draft RI and BRA reports.

Below is a list of BERA check-in topics:

EPCs: Provide EPCs for all media and receptors of concern. EPCs should be developed for SW, TZW, sediment and biota tissue. EPCs should presented in a series of tables.

Modeled tissue concentrations: The BERA problem formulation contemplates the use of estimated fish tissue and bird egg concentrations. Modeled tissue concentrations should be presented in a series of tables. Dietary dose for fish and wildlife: The BERA problem formulation includes estimation of dietary doses for fish, birds and mammals. A table of estimated dietary doses should be provided. Benthic Risk: Reference envelope calculations, predictive model(s) output should be provided in table format. A map depicting the results of the benthic risk evaluation should be provided. Refined Screen: It may be useful to provide a summary of the refined screen (chemicals that are carried forward)

TRVs: Once the fish tissue TRVs are resolved, we should have agreement on the TRVs. However, we may want to confirm the TRVs that EPA provided previously (e.g., SQGs, water TRVs, dietary TRVs).

Probabilistic Approaches: It is unclear whether probabilistic approaches are being considered, we should discuss them.

In addition to the above items, we have also discussed check-ins on the

 $\ensuremath{\mathsf{BSAF/FWM}}$ as part of the PRG development step and the weight of evidence approach some time later.

We can discuss this further at tomorrow's management team meeting $\ensuremath{\mathsf{Thanks}}$, $\ensuremath{\mathsf{Eric}}$